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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,534	07/01/2003	Luping Wang	ATMI-469-DIV	4731
25559	7590	10/14/2005	EXAMINER	
ATMI, INC. 7 COMMERCE DRIVE DANBURY, CT 06810			LAWRENCE JR, FRANK M	
			ART UNIT	PAPER NUMBER

1724

DATE MAILED: 10/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/611,534

Applicant(s)

WANG ET AL.

Examiner

Frank M. Lawrence

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-27, 51-53 and 56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22-27, 51-53 and 56 is/are allowed.
- 6) ☒ Claim(s) 19-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 19-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Herrmann et al. (6,309,546).

3. Herrmann et al. '546 teach a method of making a porous metal matrix, comprising providing platinum or gold particles having a diameter in the range of 0.005-10 microns, and sintering the particles to form the matrix. Temperatures of 350-1000° C are used for heating the matrix (col. 4, lines 38-64, col. 6, lines 22-38, col. 8, lines 16-62, claims 1, 9).

4. Claims 19 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Magladry et al. (3,803,043).

5. Magladry et al. '043 teach a method of making a porous metal matrix, comprising providing a powdered metal such as platinum and sintering to form the matrix. In an example, the particles are sintered at 1400° C (col. 1, lines 47-57, col. 2, line 63 to col. 3, line 5).

6. Claims 19 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Falce (4,165,473).

Art Unit: 1724

7. Falce '473 teaches a method of making a porous metal matrix, comprising providing iridium particles having a diameter of 2-8 microns, and sintering to form the matrix (col. 4, lines 9-25).

8. Claim 19 is rejected under 35 U.S.C. 102(b) as being anticipated by Goeser et al. (5,266,414).

9. Goeser et al. '414 teach a method of making a porous metal matrix, comprising providing a powdered metal containing 1-6% iridium, osmium, rhodium, or ruthenium, and sintering to form the matrix (col. 2, line 25 to col. 3, line 2).

10. Claims 19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Inoue et al. (6,136,170).

11. Inoue et al. '170 teach a method of making a porous metal matrix, comprising providing gold powder having an average particle size of 1.0 micron, and sintering at 1470° C to form the matrix (col. 52, lines 25-42).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over either one of Goeser et al. '414 or Falce '473.

14. Either one of Goeser et al. '414 or Falce '473 discloses all of the limitations of the claim except that the sintering takes place at about 20° C to about 1500° C. It is submitted that one

Art Unit: 1724

having ordinary skill in the art would understand that the temperature for sintering the particles into a porous body must be selected to achieve effective agglomeration of the particles without complete melting, and therefor would arrive at a suitable temperature through routine optimization.

Allowable Subject Matter

15. Claims 22-27, 51-53 and 56 are allowed.

Response to Arguments

16. Applicant's arguments with respect to claims 19-21 have been considered but are moot in view of the new ground(s) of rejection. The examiner agrees that the previously cited prior art fails to anticipate claims 19-21 as amended. New rejections are presented to address the amended claims.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional references listed on the attached PTO-892 form disclose porous metal bodies.

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

Art Unit: 1724

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank M. Lawrence whose telephone number is 571-272-1161. The examiner can normally be reached on Mon-Thurs 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frank M. Lawrence
Primary Examiner
Art Unit 1724

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Frank Lawrence
10-12-05